

2.5 - Multiplication of Real Numbers

$$\text{---} \times \text{---} = +$$

$$+ \times + = +$$

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Multiplication Rule:

If the numbers have the same sign, then the product is positive.

If the numbers have opposite signs, then the product is negative.

Ex 1: $(-6)(4)(-2)$

$$-6 \cdot 4 = -24 \cdot -2 = \textcircled{48}$$

Ex 2: $(-7)(-4) \left(-\frac{1}{2}\right)$

$$28 \cdot \left(-\frac{1}{2}\right) = \boxed{-14}$$

Ex 3: A flying squirrel descends from a tree with a velocity of -6 feet per second. Find its vertical displacement in 3.5 seconds.

Note: displacement is the change in the position of an object (unlike distance it can be positive, negative, or zero)

$$d = v \cdot t$$
$$-6 \cdot 3.5 = -21 \text{ ft}$$



Ex 4: Your aunt lends you \$175 to buy an Ipod Nano. She will decrease the amount you owe by \$25 for each day you help her by doing odd jobs. What is the change in the amount you owe your aunt after helping her out for 5 days? How much do you still owe her?

$$\begin{aligned} & -\$25 \times 5 = \\ & -\$125 \end{aligned}$$

$$175 - 125 = \$50$$



Homework: Worksheet 2.5